



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/765,540	01/26/2004	Jisu Bhattacharya	2705-317	1625
20575 7590 08/02/2007 MARGER JOHNSON & MCCOLLOM, P.C. 210 SW MORRISON STREET, SUITE 400 PORTLAND, OR 97204			EXAMINER MOORE, IAN N	
			ART UNIT 2616	PAPER NUMBER
			MAIL DATE 08/02/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/765,540

Applicant(s)

BHATTACHARYA ET AL.

Examiner

Ian N. Moore

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 26 January 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 7, 10-12 and 14 is/are allowed.
- 6) ☒ Claim(s) 1-3, 5, 6, 15, 16 and 18-20 is/are rejected.
- 7) ☒ Claim(s) 4, 8, 9, 13 and 17 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 1/26/04 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Specification*

1. The abstract of the disclosure is objected to because it contains the phrase, "invention" in lines 1,3,5,7 and 9, which can be implied. It is suggested to remove "*of the invention*".

Correction is required. See MPEP § 608.01(b).

### *Claim Objections*

2. Claims 8,9,19 and 20 are objected to because of the following informalities:

**Claim 8** recites "**the** number of times" in line 2. Since it is recited for the first time in the claim, for clarity it is suggested to change "the number of times" to "**a** number of times".

**Claim 9** recites "**the** ATM cells" in line 2. For consistency and clarification with "an ATM cell" recited in claim 7, line 8, it is suggested to change "the ATM cell" in line 2, to "the ATM **cell**".

**Claim 19** recites "**the** ATM cell" in line 4. Since it is recited for the first time in the claim, for clarity it is suggested to change "**the** ATM cell" to "**a** ATM cell".

**Claim 20** is also objected since they are depended upon objected claim 19 as set forth above.

Appropriate corrections are required.

### *Claim Rejections - 35 USC § 102*

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Art Unit: 2616

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claim 15 is rejected under 35 U.S.C. 102(e) as being anticipated by Lee (US 20030099240A1).

**Regarding Claim 15**, Lee discloses a method comprising

adaptively adjusting a default timer value (see FIG. 4, output rate controller 403; FIG. 12, S1203; see FIG. 13, S1307; see page 4, paragraph 49,51,56-58,63; updates/adjusts predetermined/default coin value of a predetermined/default time period (i.e. default timer value)) in a subcell multiplexer (see FIG.4, in AAL-2 Mux 402; note that AAL-2 type is a subset type of ATM cell or sub-cell) to optimize a delay experienced by a voice packet (see FIG. 15, to determine best/optimize of a delay (i.e. minimum delay) for a voice packet) in response to a voice traffic condition (see page 2, paragraph 36-37; see page 4, paragraph 49-56; see page 5, paragraph 69-72; adjusting/updating in order to prevent (i.e. to optimize) bandwidth waste which causes delay for a voice packet according to the state/form/condition of voice packets traffic (i.e. number of voice packets, or number of voice call/traffic, different input rate of voice call)).

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

Art Unit: 2616

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lyons (US006282196B1) in view of Lee (US 20030099240A1).

**Regarding Claim 1**, Lyons discloses a device (see FIG. 4,12, a voice packet communication system) comprising:

a digital signal processor (see FIG. 4,12, a combined system of voice encoder/decoder 110 and AAL-2/SSCS processor 130 has a digital signal processing capability) that is configured to convert a plurality of voice signals into voice packets (see FIG. 4,12, encoder/decoder 100 encodes/decodes/converts audio streams into audio/voice packets; see col. 5, line 40-60; see col. 10, line 61-67), the digital signal processor having a voice activity detector (see FIG. 4,12, AAL-2/SSCS processor 130 has voice detecting/determining/monitoring capability) that is configured to monitor the plurality of voice signals (see col. 5, line 56 to col. 6, line 15; see col. 9, line 65 to col. 10, line 10; processor 130 detects/monitors the active voice and non-active/silent periods of incoming audio/voice streams; also see FIG. 10, S305,S320; see col. 9, line 65 to col. 10, line 23); and

a packet transmitter having a subcell multiplexing unit (see FIG. 4,12, a transmitter means in combined system of AAL-2/SSCS processor 130 and ATM processor 135) configured to adaptively adjust a time/counter experienced by a voice packet based upon a state change of the voice activity detector (see FIG. 10, S305,315,320,325,330,335; updating/resting counter/time with respects to a voice packet according to a change in active or silent mode/state detected by a processor 130; see col. 9, line 65 to col. 10, line 23).

Lyons does not explicitly disclose a maximum delay time.

Art Unit: 2616

However, adjusting/resting/updating delay time/counts in packets/cell transmission is well known in the art in order to increase the efficiency. In particular, Lee teaches a packet transmitter having a subcell multiplexing unit (see FIG.4, a combined transmission system of AAL-2 Mux 402 and controller 403 is a subcell AAL-2 mux) configured to adaptively adjust a maximum delay time experienced by a voice packet (see page 2, paragraph 36-37; see page 3, paragraph 36,41; see page 5, paragraph 65,69-71; updating/calculation/adjusting peak/maximum delay of the voice packets).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a peak delay time, as taught by Lee in the system of Lyons, so that it would avoid unnecessary time delay by efficiently using bandwidths of communication links; see Lee page 1, paragraph 13-14.

**Regarding Claim 6**, Lyons discloses wherein the voice packets are configured to be transmitted over a network chosen from the group consisting of an asynchronous transfer mode network (see FIG. 4, 12, voice packets are transmitted over ATM network; see col. 6, line 16-20; see col. 10, line 60-67).

7. Claims 2-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lyons in view of Lee as applied to claim 1 above, and further in view of Bharucha'821 (US006229821B1).

**Regarding Claim 2**, Lyons discloses a subcells multiplexing unit as set forth above in claim 1. Lee discloses a connection admission controller (see FIG. 4, Output rate controller 403) configured to monitor a packet rate for each of the plurality of voice signals (see FIG. 4, Output rate controller 403 monitors/controls a rate of the AAL-2 voice cells associated with number of

Art Unit: 2616

voice calls; see page 3, paragraph 37, 39,40,42; see page 4, paragraph 62) and configured to signal the packet transmitter (see FIG. 4, a transmitter of Mux 402) when a change in the packet rate occurs (see FIG. 4, Output rate controller 403 sends a control signal/indication to a Mux 402 regarding the update/change/new rate); see page 3, paragraph 37, 39,40,42; see page 4, paragraph 49-63).

Neither Lyons nor Lee explicitly discloses a packet length.

However, monitoring the packet/frame size/length at connection admission control (CAC) is well known in the art to control the admission. In particular, Bharucha'821 teaches monitoring packet length (see col. 4, line 43-44; determining/monitors the size of the frame) and transmitting a change in the packet length (see col. 4, line 41-51; see col. 5, line 1-45; see col. 1, line 45-64; see col. 2, line 13-20; see col. 3, line 60-65; transmitting an indication/signal to lower layer after changing/varying the size of the packet).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a packet length, as taught by Bharucha'821 in the combined system of Lyons and Lee, so that it would reduce overhead; see Bharucha'821 col. 3, line 15-20,23-30,55-58.

**Regarding Claim 3**, the combined system of Lyons and Lee discloses the packet transmitter is configured to adjust the maximum delay time as set forth above in claim 1. Lee further discloses adjusting a maximum delay time (see page 2, paragraph 36-37; see page 5, paragraph 65,69-71; determining/adjusting peak/maximum delay of the packets) based upon a change in the packet rate (see page 3, paragraph 41,44,47; see page 4, paragraph 51, 59,60; according to various/different/change in the incoming data).

Neither Lyons nor Lee explicitly discloses a packet length.

However, monitoring the packet/frame size/length at connection admission control (CAC) is well known in the art to control the admission. In particular, Bharucha'821 teaches monitoring packet length (see col. 4, line 43-44; determining the size of the frame) and adjusting a delay based upon a change in the packet length (see col. 4, line 41-51; see col. 5, line 41-45; see col. 1, line 45-64; see col. 2, line 13-20; determining/adjusting delay according to the size/length of the frame/packet).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a packet length, as taught by Bharucha'821 in the combined system of Lyons and Lee, so that it would reduce overhead; see Bharucha'821 col. 3, line 15-20, 23-30, 55-58.

8. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lyons in view of Lee as applied to claim 1 above, and further in view of Chauffour (US005870397A).

**Regarding Claim 5**, the combined system of Lyons and Lee discloses the subcell multiplexing unit configuration to multiplex a voice packet (see Lyons see col. 5, line 35 to col. 6, line 20; see Lyons col. 9, line 65 to col. 10, line 23; see Lee page 3, paragraph 38-43; see Lee page 4, paragraph 80-59). Lee further discloses silent period that is generated along with the voice packet without regard to the maximum delay time (see page 2, paragraph 36; see page 3, paragraph 37-38, 46-47; silent/null period that is generated along with voice packet (i.e. without even considering the peak delay whatsoever)).

Neither Lyons nor Lee explicitly discloses a specialized signaling packet.



However, Chauffour teaches a specialized signaling packet (see FIG. 2-3, control E packet (e.g. E, E1, E2,...; see col. 4, line 50-58; see col. 5, line 1-10,20-46), immediately without regarding to the maximum delay (see 2-3, sending control E packets directly/immediately upon receiving among voice V packets (i.e. without even considering any delay whatsoever); see col. 5, line 10-47).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a specialized signaling packet, and immediately upon receiving the signaling packet among the voice packets, as taught by Chauffour in the combined system of Lyons and Lee, so that it would minimize overhead on the packets or cells, while offering a good quality; see Chauffour col. 2, line 37-45.

9. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lee in view of Bharucha'821 (US006229821B1).

**Regarding Claim 16**, Lee discloses adaptively adjusting the default timer value comprises:

monitoring a packet rate of a plurality of voice calls (see FIG. 4, Output rate controller 403 monitors/controls a rate of the AAL-2 voice cells associated with number of voice calls; see page 3, paragraph 37, 39,40,42; see page 4, paragraph 62); and

calculating a maximum delay (see page 2, paragraph 36-37; see page 5, paragraph 65,69-71; determining/calculation peak/maximum delay of the packets) experienced by the partially filled voice packet (see page 3, paragraph 36,41; for ATM AAL-2 cell, which is partially/partly filled with voice data/payload, (i.e. while other parts/areas of the cell is filled with a header, or

Art Unit: 2616

silent period)) based upon a change in the packet rate (see page 3, paragraph 41,44,47; see page 4, paragraph 51, 59,60; according to various/different/change in the incoming data).

Lee does not explicitly disclose a packet length.

However, monitoring the packet/frame size/length at connection admission control (CAC) is well known in the art to control the admission. In particular, Bharucha'821 teaches monitoring packet length (see col. 4, line 43-44; determining the size of the frame) and calculation a delay based upon a change in the packet length (see col. 4, line 41-51; see col. 5, line 41-45; see col. 1, line 45-64; see col. 2, line 13-20; determining/calculating delay according to the size/length of the frame/packet).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a packet length, as taught by Bharucha'821 in the system of Lee, so that it would reduce overhead; see Bharucha'821 col. 3, line 15-20,23-30,55-58.

10. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lee and Bharucha'821, as applied to claim 16 above, and further in view of Burger (US 20030028661A1).

**Regarding Claim 18**, Lee discloses adaptively adjusting the default timer value further comprises setting the default timer value to be a updated value (see page 4, paragraph 49,51,56-58,63; updates/adjusts predetermined/default coin value for a predetermined/default time period (i.e. coin interval))) and calculating the maximum delay as set forth above in claim 16.

Neither Lee nor Bharucha'821 explicitly disclose no greater than (e.g. threshold).

However, determining maximum delay against threshold is well known in the art. IN particular, Burger discloses setting the default timer value to be no greater than the maximum delay (see page 1, paragraph 11; see page 3, paragraph 37; see page 4, paragraph 38-39; assigning/setting predetermined/default packet processing time to less than maximum latency).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide no greater than the maximum delay, as taught by Burger, in the combined system of Lee and Bharucha'821, so that it would process packet media streams in a manner that would enable stricter latency goals to be met; see Burger page 1, paragraph 8-9.

11. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lee in view of Chauffour (US005870397A).

**Regarding Claim 19**, Lee discloses differentiating between a voice packet and silent period that is generated along with the voice packet (see page 2, paragraph 36; see page 3, paragraph 37-38,46-47; determining a different between voice packets and silent/null period that is generated along with voice packet); and

forwarding the ATM cell, even if it is partially filled, (see page 2, paragraph 36; see page 4, paragraph 51,59; sending ATM cell even if it is partially/partly filled with voice data/payload, (i.e. while other parts/areas of the cell is filled with a header, or silent/null period)).

Lee does not explicitly disclose a signaling packet, and immediately upon receiving the signaling packet among the voice packets.

However, Chauffour teaches differentiating between a voice packet (see FIG. 2-3, V packets) and a signaling packet (see FIG. 2-3, control E packet (e.g. E, E1, E2,...)) that is

Art Unit: 2616

generated along with the voice packet (see col. 4, line 50-58; see col. 5, line 1-10,20-46; determining/differentiation between V packets and E packets before transmitting); and

forwarding the ATM cell, even if it is partially filled, (see col. 1, line 25-30; see col. 2, line 21-29; see col. 3, line 15-25; see col. 4, line 51-58; see col. 5, line 40-30; see FIG. 1, transmitting ATM cell from input node 50 even if is partially filled with voice packets/data), immediately upon receiving the signaling packet among the voice packets (see 2-3, sending control E packets directly/immediately upon receiving among voice V packets; see col. 5, line 10-47).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a signaling packet, and immediately upon receiving the signaling packet among the voice packets, as taught by Chauffour in the system of Lee, so that it would minimize overhead on the packets or cells, while offering a good quality; see Chauffour col. 2, line 37-45.

12. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lee and Chauffour, as applied to claim 19 above, and further in view of Bharucha'056 (US006345056B1).

**Regarding Claim 20**, Lee discloses a silent period in the VoAAL2 subcell multiplexing (see FIG. 4, voice over AAL-2 MUX 201; see page 3, paragraph 38). Chauffour wherein the signaling packet is used in voice over ATM multiplexing (see FIG. 1, Input node multiplexes control packets E and voice packets V; see page 2, paragraph 36; see page 4, paragraph 51,59).

Neither Lee nor Chauffour explicitly disclose a Type 3 packet.

However, it is well known in the art of ATM standard (i.e. ITU-T 1.166.2 2/99, see attached) that Voice over AAL-2 utilizes a AAL-2 Type 3 packet in order to transmit control and signaling information. In particular, Bharucha'056 discloses the signaling packet is a Type 3 packet used in VoAAL2 subcell multiplexing (see FIG. 1, a non-homogenous mixed mode AAL-2 type 3 packet provide signaling and controlling information for packet formatter and ATM layer 24 unit which performs multiplexing of voice packets; see col. 3, line 35-60; col. 4, line 15-21; see col. 6, line 25-35).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a Type 3 packet, as taught by Bharucha'056 or ITU-standard, in the combined system of Lee and Chauffour, so that it would enable ATM cell to be efficiently packet, see Bharucha'056 col. 2 line 34-40, also by implementing according to the standard, it will also provide interoperability in the network.

#### ***Allowable Subject Matter***

13. **Claims 7,10-12 and 14** are allowed.

14. The following is a statement of reasons for the indication of allowable subject matter:

**Claims 7,10-12 and 14** is allowable over the prior art of record since the cited reference taken individually or in combination fails to particularly disclose or render obvious the following italic limitations:

**In Independent claim 7, ...a control module adjust the timer value (which has been expired) based upon a frequency at which the silent indication packets are received by the subcell multiplexer...** in combination with other limitations recited as specified in Claim 7.

Note that the first closet prior art Lyons discloses a voice over packet gateway (see FIG. 4,12, a voice packet communication system) comprising: a digital signal processor (see FIG. 4,12, a combined system of voice encoder/decoder 110 and AAL-2/SSCS processor 130 has a digital signal processing capability) that is configured to convert a plurality of voice signals into voice packets (see FIG. 4,12, encoder/decoder 100 encodes/decodes/converts audio streams into audio/voice packets; see col. 5, line 40-60; see col. 10, line 61-67), the digital signal processor having a voice activity detector (see FIG. 4,12, AAL-2/SSCS processor 130 has voice detecting/determining/monitoring capability) that is configured to monitor the plurality of voice signals (see col. 5, line 56 to col. 6, line 15; see col. 9, line 65 to col. 10, line 10; processor 130 detects/monitors the active voice and non-active/silent periods of incoming audio/voice streams; also see FIG. 10, S305,S320; see col. 9, line 65 to col. 10, line 23); and a packet transmitter having a subcell multiplexing unit (see FIG. 4,12, a transmitter means in combined system of AAL-2/SSCS processor 130 and ATM processor 135) configured to adaptively adjust a time/counter experienced by a voice packet based upon a state change of the voice activity detector (see FIG. 10, S305,315,320,325,330,335; updating/resting counter/time with respects to a voice packet according to a change in active or silent mode/state detected by a processor 130; see col. 9, line 65 to col. 10, line 23). However, Lyons fails to disclose or render obvious the above limitation as claimed in claim 7.

Note that the second closet prior art Lee discloses a packet transmitter having a subcell multiplexing unit (see FIG.4, a combined transmission system of AAL-2 Mux 402 and controller 403 is a subcell AAL-2 mux) configured to adaptively adjust a maximum delay time experienced by a voice packet (see page 2, paragraph 36-37; see page 3, paragraph 36,41; see page 5,

Art Unit: 2616

paragraph 65,69-71; updating/calculation/adjusting peak/maximum delay of the voice packets).; adjusting a maximum delay time (see page 2, paragraph 36-37; see page 5, paragraph 65,69-71; determining/adjusting peak/maximum delay of the packets) based upon a change in the packet rate (see page 3, paragraph 41,44,47; see page 4, paragraph 51, 59,60; according to various/different/change in the incoming data). However, Lee fails to disclose or render obvious the above limitation as claimed in claim 7.

15. **Claims 4** is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

**Dependent claim 4** is allowable over the prior art of record since the cited reference taken individually or in combination fails to particularly disclose or render obvious the following italic limitations:

**In claim 4, ...**

$$D_{\max(\text{new})} = \left[ \frac{1}{D_{\max(\text{old})}} + \frac{(P_{\text{new}} R_{\text{new}} - P_{\text{old}} R_{\text{old}})}{47 * 1000} \right] \text{ msec}$$

...in combination with other limitations recited as specified in Claim 4.

16. **Claims 8,9, and 13** are objected to as set forth above in paragraph 3, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Art Unit: 2616

17. **Claim 17** is objected to as set forth above in paragraph 3 and being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

**Dependent claim 17** is allowable over the prior art of record since the cited reference taken individually or in combination fails to particularly disclose or render obvious the following italic limitations:

In claim 17, ...

$$D_{\max(\text{new})} = \left[ \frac{1}{D_{\max(\text{old})}} + \frac{(P_{\text{new}} R_{\text{new}} - P_{\text{old}} R_{\text{old}})}{47 * 1000} \right] m \text{ sec}$$

...in combination with other limitations recited as specified in Claim 17.

### *Conclusion*

18. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- **Smith (US006747977B1)** discloses ATM node efficiently processing narrowband data into several packets for transmission to broadband domain using AAL-x adaptation.
- **Gerber (US006438131B1)** discloses ATM system associates a holdover indicator with each packet in voice service utilizing AAL type 2 connections.
- **ITU-T (I.3662)**, AAL type 2 service specific convergence sublayer for trunking, published 2-1999, standard.



19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ian N. Moore whose telephone number is 571-272-3085. The examiner can normally be reached on 9:00 AM- 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doris To can be reached on 571-272-7629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Ian N. Moore  
Art Unit 2616